IN THE CLAIMS:

1. (Currently Amended) A system for controlling upsets comprising:

variable power supply means for supplying power to a circuit;

controller means for providing a first instruction to said variable power supply means to increase the voltage supplied to said circuit when susceptibility to upsets is high and a second instruction to decrease the voltage supplied to said circuit when susceptibility to upsets is low; and

[actuating means] an ambient radiation monitor for sending an actuating signal to said controller means.

2. (Currently Amended) The [invention] system of Claim 1 wherein said controller means is a ground station ~~and said actuating means is a ground crew~~.

3. (Currently Amended) The [invention] system of Claim 1 wherein said [actuating means is] ambient radiation monitor includes a pre-programmed clock.

4. (Currently Amended) The [invention] system of Claim 3 wherein said pre-programmed clock is the system clock.

5. (Canceled) T he i nvention o f C laim 1 wherein said actuating means is an ambient radiation monitor.

6. (Canceled) The invention of Claim 1 wherein said actuating means is an error rate monitor.

7. (Currently Amended) The [invention] system of Claim 1 further comprising a variable frequency clock means for regulating the clock rate of said [microcircuit] circuit whereby power consumption of said circuit is maintained constant.

8. (Currently Amended) A system for controlling upsets comprising:

a variable power supply connected to a circuit;

a controller connected to said variable power supply; said controller designed to provide a first instruction to said variable power supply to increase the voltage supplied to said circuit when susceptibility to upsets is high and a second instruction to decrease the voltage supplied to said circuit when susceptibility to upsets is low; and

an [actuator] ambient radiation monitor designed to send an actuating signal to said controller.

9. (Currently Amended) The [invention] system of Claim 8 wherein said controller is a ground station ~~and said actuator is a ground crew~~.

10. (Currently Amended) The [invention] system of Claim 8 wherein said [actuator is] ambient radiation monitor includes a pre-programmed clock.

11. (Currently Amended) The [invention] system of Claim 10 wherein said pre-programmed clock is the system clock.

12. (Canceled) The invention of Claim 8 wherein said actuator is an ambient radiation monitor.

13. (Canceled) The invention of Claim 8 wherein said actuator is an error rate monitor.

14. (Currently Amended) The [invention] system of Claim 8 further comprising a variable frequency clock connected to said circuit.

15. (Currently Amended) A method of controlling upsets comprising the steps of:

supplying power to a circuit;

providing a first instruction to a variable power supply to increase the voltage supplied to said circuit when susceptibility to upsets is high and a second instruction to decrease the voltage supplied to said circuit when susceptibility to upsets is low, wherein said supply voltage is varied as a function of local radiation; and

sending an actuating signal to a controller.

16. (Canceled) The invention of Claim 15 wherein said supply voltage is varied by remote control.

17. (Currently Amended) The [invention] system of Claim 15 wherein said supply voltage is also varied as a function of time.

18. (Canceled) The invention of Claim 15 wherein said supply voltage is varied as a function of local radiation.

19. (Canceled) The invention of Claim 15 wherein said supply voltage is varied as a function of error rate in said circuit.

20. (Currently Amended) The [invention] system of Claim 15 additionally comprising the step of varying the clock rate of said circuit in order to keep power consumption constant.

21. (Currently A mended) A method of controlling upsets in a circuit comprising the steps of:

providing a variable power supply;

connecting said variable power supply to said circuit;

providing a controller[;] , said controller designed to provide a first instruction to said variable power supply to increase the voltage supplied to said circuit when susceptibility to upsets is high and a second instruction to decrease the voltage supplied to said circuit when susceptibility to upsets is low.

connecting said controller to said variable power supply;

providing an [actuator] ambient radiation monitor designed to send a signal to said controller to cause said controller to provide said instructions; and

sending said signal.

[23.] 22. (Currently Amended) The [invention] system of Claim [22] 21 wherein said controller is a ground station ~~and said actuator is a ground crew~~.

[24.] 23. (Currently Amended) The [invention] system of Claim 22 wherein said [actuator is] ambient radiation monitor includes a pre-programmed clock.

24. (Currently Amended) The invention of Claim [24] 23 wherein said pre-programmed clock is the system clock.

[26.] 25. (Canceled) The invention of Claim 22 wherein said actuator is an ambient radiation monitor.

[27.] 26. (Canceled) The invention of Claim 22 wherein said actuator is an error rate monitor.

[28.] 27. (Currently Amended) The invention of Claim [22] 21 further comprising the steps of:

providing a variable frequency clock and

connecting said variable frequency clock to said [microcircuit] circuit whereby power consumption of said circuit is maintained constant.